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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

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In the Matter of:

Establishment of an Advisory
Committee to Negotiate Proposed
Regulations for the Provision
of Mobile-Satellite Services
Above 1 GHz.

CC Docket No. 92-166

COMMENTS OF
MOTOROLA SATELLITE COMMUNICATIONS, INC.

Motorola Satellite Communications, Inc. ("Motorola") has repeatedly expressed its interest in the expeditious licensing of low-earth orbit ("LEO") satellite systems above 1 GHz. Most recently, Motorola submitted a detailed Petition for Expedited Action to the Commission in which it pointed out the urgent need for prompt action on these pending LEO applications, including the adverse affect that regulatory delay in the United States would have on overall U.S. competitiveness and leadership in important communications and satellite technologies.^{1/} Accordingly, Motorola is in favor of any initiative which leads to the early introduction of mobile-satellite services ("MSS") and radiodetermination services ("RDSS") in the United States and throughout the world.

^{1/} See Petition for Expedited Action, File Nos. 9-DSS-P-91(87) & CSS-91-010, et al. (June 9, 1992).

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As an initial matter, Motorola believes that the Commission already has a voluminous record before it from which it can formulate and resolve all of the important technical, service and licensing issues raised by the pending applications without a negotiated rulemaking process.^{2/} It is disappointing that over five months have passed since the conclusion of WARC-92 and the Commission apparently has not been able to arrive at a tentative conclusion on any of the technical and non-technical issues raised by the pending applications. Surely the Commission could have presented its proposals for a negotiated rulemaking much sooner, in light of the lack of any decisions, preliminary or otherwise, in the Public Notice.^{3/}

If the Commission decides to undertake a negotiated rulemaking, than it is incumbent upon the Commission to take steps to make it as likely as possible that the process will succeed. Time is of the essence, and the Commission does not have the luxury of trying experimental licensing and regulatory procedures which do not have any reasonable prospects for success. Otherwise, the Commission will simply have delayed the licensing process by another six months. Further delay in the regulatory process will adversely affect every applicant in this proceeding, and impede the development of U.S. technologies and competitiveness.

^{2/} Over the past 20 months, there have been two full rounds of pleadings on the applications, one round of comments on related petitions for rulemaking and another set of comments on requests for pioneer's preference.

^{3/} See Public Notice, DA 92-1085, released August 7, 1992.

Motorola believes that several changes need to be made to the scope of the negotiated rulemaking process as proposed in the Public Notice in order for the process to have a reasonable likelihood of success. All of these changes, as hereinafter described, are fully consistent with both the Federal Advisory Committee Act, 5 U.S.C. App. 2 ("FACA"), and the Negotiated Rulemaking Act of 1990, Pub. L. 101-648 (Nov. 28, 1990).

I. Timing of the Negotiation Process Must Be Reduced

The Commission has proposed that the first meeting of the Committee be held sometime in November 1992, and that the meetings end by March 1, 1993. It further proposes subsequently to issue a notice of proposed rulemaking by May 1993.

This amount of time is simply too long for the Committee to conclude its business. The parties must be under tighter deadlines so as to complete the Committee's work as fast as possible. Motorola proposes that the negotiated rulemaking process begin promptly on November 1, 1992, and be completed by January 15, 1993. If it becomes apparent that there is no likelihood of consensus, or if consensus can be reached more quickly, than the process should terminate sooner than January 15. A comprehensive notice of proposed rulemaking should issue no later than March 15, 1993, or two months after the Committee submits its recommendations, whichever is first. Motorola is prepared to devote the necessary resources to this endeavor, and the other parties should be required to do so as well. Otherwise, the Commission runs a significant risk of wasting over

six months without making any real progress towards licensing LEO MSS systems in the United States.

II. Expand the Scope of the Negotiated Rulemaking Work Plan to Include Alternative Spectrum Proposals

In its Public Notice, the Commission identified only two key technical issues for consideration by the Committee. The scope of the Committee's work must be expanded to include discussion of alternative spectrum proposals for there to be any reasonable prospect of achieving a consensus during the negotiated rulemaking process. It should be obvious to anyone who has given the question any thought that the amount of spectrum available in the RDSS bands is insufficient to accommodate all five LEO MSS applicants. Multiple entry may only be achievable if additional MSS spectrum above 1 GHz can be found for the LEO applicants.

Motorola has already presented the Commission with two viable spectrum alternatives which would allow for the licensing of at least the initial systems proposed by all of the qualified LEO MSS applicants.^{4/} Other spectrum solutions may also be achievable which are worthy of further consideration. This Committee would provide an excellent vehicle for all affected

^{4/} Motorola presented two alternative spectrum options in its Petition for Expedited Action. It will soon renew those requests for additional MSS allocations in a petition for rulemaking.

parties to consider the technical issues associated with each of these spectrum alternatives.^{5/}

III. The Four CDMA Proponents Must Define
A Proposed Common CDMA System Before
the Committee's Work Begins

Any discussion as to achieving CDMA and FDMA system sharing must be based upon a common understanding of the types of systems proposed by the applicants. Motorola has already provided a detailed description of the IRIDIUM™ system in its application, subsequent amendment, and pleadings. The four CDMA applicants have also described their proposed systems in their applications. However, although each of these applicants has proposed significantly different systems and modulation schemes, each of them has asserted that, with certain modifications, it will be able to share the same spectrum with other CDMA systems.

In order to facilitate any discussion as to the potential for multiple CDMA systems to share spectrum, the Commission must require the applicants who have asserted that they can agree upon a common CDMA system definition and frequency plan to provide the other members of the Committee with concrete information and analysis describing the common system approach that they contemplate. Such information must include capacity definition internal to the systems and a sharing analysis with other systems.

^{5/} As various spectrum alternatives are considered by the Committee, significantly affected parties not otherwise participating in the Committee's work could be brought into the meetings.

The four CDMA applicants announced last year that they could share the available MSS spectrum, and they have now had over ten months to agree upon a common system design. The Commission must require these applicants to supply this information in advance of the first Committee meeting in order to expedite the negotiating process by allowing other members of the Committee an opportunity to analyze the joint CDMA proposal in advance of the formal discussions. Until the four CDMA proponents produce a technical description of the homogeneous system they would use to share spectrum, it is not possible for the other members of the Committee, such as Motorola, to consider whether and how FDMA/TDMA systems might co-exist with proposed CDMA systems.

IV. AMSC Should Be Excluded from the Negotiated Rulemaking

The Commission should make a decision at the outset that AMSC is not a party to the negotiated rulemaking. Including AMSC will only prevent the Committee from reaching any consensus. AMSC proposes a geostationary MSS system in the band. AMSC's proposed system cannot share the same spectrum with any of the other LEO MSS applicants. In fact, AMSC has conceded in its filings that its satellites will not be able to coexist with other LEO MSS systems.

In its recently released Notice of Proposed Rulemaking, FCC 92-358 (released Sept. 4, 1992), the Commission has rejected AMSC's petition to allocate the 1616-1626.5 MHz band and the 1515-1525 MHz band for geostationary MSS and permanently assign

those frequencies to AMSC. Id. at ¶ 16 n.15. In addition, AMSC's proposed operation in the RDSS uplink band would be in conflict with the Commission's proposed domestic allocations for that band. Specifically, the Commission has proposed the inclusion of international Radio Regulation No. 731X to the domestic allocation tables which would create an absolute limit of -3 dBW/4kHz on EIRP densities in the portion of the RDSS uplink band proposed by AMSC for its operations. Id. at App. A. AMSC's proposed geostationary satellites will not be able to comply with this limit under any circumstances. Accordingly, no useful purpose would be served by including AMSC on the negotiating Committee.^{6/}

V. Committee Membership Must Be Kept Small

Pursuant to FACA, "new advisory committees should be established only when they are determined to be essential and their number should be kept to the minimum necessary." 5 U.S.C.A. App. 2 § 2(b)(2). The Commission has proposed that there be about twelve, but as many as 25 participants in the negotiated rulemaking process. This represents an entirely too large a group of participants for there to be any reasonable

^{6/} Similarly, the Commission must reject CELSAT, Inc.'s application for formal membership on the Committee. CELSAT has not formally applied for a proposed system in the bands under consideration, and its petition for use of the RDSS bands was dismissed by the Commission in its Notice of Proposed Rulemaking, at ¶ 16 n.15. The Commission specifically noted that CELSAT's request for terrestrial operations in the RDSS bands was inconsistent with the WARC-92 allocation for the United States, and that its alternative spectrum proposals above 2 GHz would be addressed in another proceeding.

likelihood of achieving a consensus. There are only five LEO MSS applicants and a very small number of other existing users that could be significantly affected by any rule changes.^{1/}

In order to ensure that the membership in the Committee is kept to a manageable number, the Commission should provide an opportunity for interested parties to comment on timely-filed applications requesting participation. It may be that additional members not previously identified by the Commission would be significantly affected by the MSS regulations under consideration by the Committee; however, their interests might be adequately represented by persons already designated as members. All affected parties should have an opportunity to make their views known to the Commission on the inclusion of additional members to the Committee.

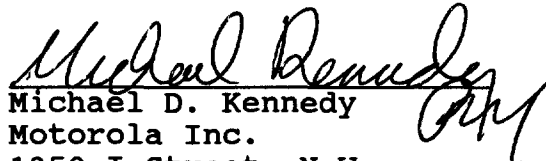
^{1/} Issues relating to particular alternative spectrum solutions could be addressed in subgroups with only the affected users of the bands under consideration participating.


CONCLUSION

For the foregoing reasons, the Commission must incorporate the proposals set forth herein into its negotiated rulemaking process for MSS/RDSS systems above 1 GHz.

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